

# Joint Theater Trauma System Clinical Practice Guideline

## FASCIOTOMY OF THE BURNED EXTREMITY

### 1. Background:

In the absence of an electrical burn or an underlying fracture, in the civilian burn population, fasciotomies on burned extremities are rarely, if ever, indicated or performed. Exact fluid resuscitation with the burn flow sheet and prompt escharotomy prevents the need for a subsequent fasciotomy.

### 2. Theater Management:

- a. In the combat casualty, fasciotomies on burned extremities may be required for the following:
  - i. -Crush or electrical injuries
  - ii. -Fractures
  - iii. -Fragment or gunshot wounds
  - iv. -Delayed revascularization
  - v. -Multiple trauma that creates a need for massive resuscitation.
- b. Outside of these indications, the need for fasciotomy is rare and fasciotomy should only be performed for the clinical diagnosis of compartment syndrome, as diagnosed by clinical exam and if available confirmed by measurement of compartment pressures.
- c. In the absence of crush injury, fracture, multiple trauma, over-resuscitation, electrical injury or similar indications, **prophylactic fasciotomies on burned extremities increase morbidity and mortality and are not indicated.** High altitude, in and of itself, is not a contributor to compartment syndrome in a burned extremity, and therefore is not an indication for a prophylactic fasciotomy.
- d. If long range air evacuation is imminent, and there is concern for a delayed compartment syndrome that could go unrecognized in flight, then consideration should be given, as the overall patient condition warrants, to delaying evacuation and following the patient with serial exams and/or compartment pressures in a facility where fasciotomy can be immediately performed if necessary. Evacuation can proceed once the following has occurred.

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- i. -Clinical exam and/or compartment pressures have stabilized and the patient is no longer assessed to be at risk for delayed compartment syndrome
- ii. -Compartment syndrome has developed and complete 4 compartment fasciotomy has been performed.

**Burn consultation is available 24 hours a day.**

Theater Burn Consultant, located in Iraq is available at cell # (914) 822-1443.

Army Burn Center DSN (312) 429-2876 or (312) 429-5501

Burn / Trauma consult email ([burntrauma.consult@us.army.mil](mailto:burntrauma.consult@us.army.mil)).

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